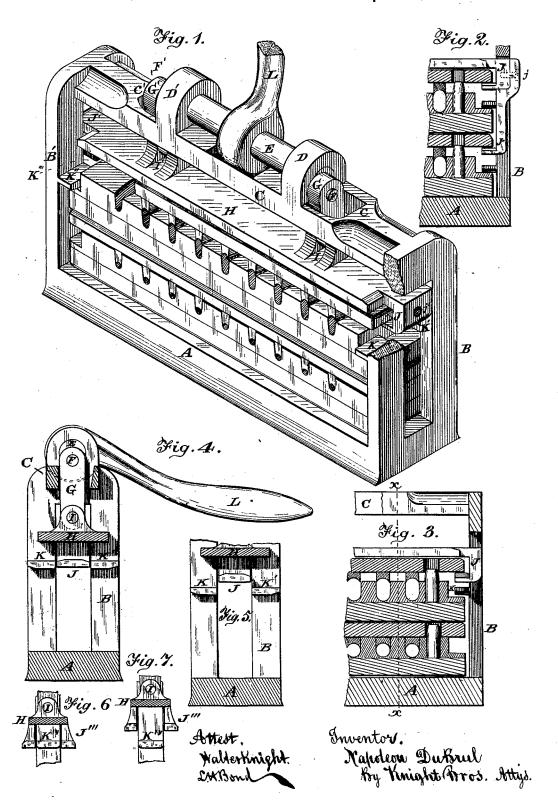
N. Du BRUL. Cigar-Mold Press.

No. 219,700.

Patented Sept. 16, 1879.



UNITED STATES PATENT OFFICE

NAPOLEON DU BRUL, OF CINCINNATI, OHIO.

IMPROVEMENT IN CIGAR-MOLD PRESSES.

Specification forming part of Letters Patent No. 219,700, dated September 16, 1879; application filed July 1, 1879.

To all whom it may concern:

Be it known that I, NAPOLEON DU BRUL, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Cigar-Mold Presses, of which the following is a specification.

This device is intended to be used with the common or any suitable cigar-molds, such as consist of a base and cap-piece containing a series of similar matrices, in which as many charges of tobacco are simultaneously brought to the desired form and consistence preparatory to being wrapped.

A leading feature of my device in its most complete form is its capacity for automatically lifting the cap from the base of one or more of the contained molds in the act of releasing the

platen.

My device, being of compact dimensions, is easily contained on the back part of an ordinary wrapping-bench, so as to be conveniently operated, if desired, by the person employed to wrap the cigars without being required to quit his seat. This enables him to use the customary molds as an auxiliary to the wrapping operation, and to combine the advantages incident to the hand-wrapping of the tobacco, while in a moist and spongy condition, with the speed, accuracy, and uniformity of and with even greater economy than accompanies the manufacture of the common machinepressed cigars.

In the accompanying drawings, Figure 1 is a perspective view of a cigar-mold presser and opener embodying a simple form of my invention, portions of one of the standards and of the upper pair of molds being broken away in order to expose the lugs and hooks whereby a release of the platen-pressure is made instrumental to open the mold-cap. Fig. 2 is a partial section illustrating a form of my invention, whereby the caps of two contained molds are opened at each elevation of the platen. Fig. 3 is a longitudinal section of a portion of the device near one end, the platen-hooks being of the form and the molds in the position illustrated in Fig. 1. Fig. 4 is a transverse section of the device at the line x x, the molds being omitted and the platen being thrown in its depressed position. Fig. 5 is a similar section with the platen elevated. Figs. 6 and 7 | Mold 1, in company with the just-filled mold

are similar sections on a smaller scale, showing a modification of my cap-lifting device.

A represents a bed or base, the dimensions of which, between the standards B B', are such as to enable the insertion of a set of ordinary cigar-molds. Extending from standard to standard, and uniting them, is a beam, C, having bearings D D for the rock-shaft E, whose cams or crank wrists F F' are connected by rods G G', traversing slots c c'in the beam, and by pivots I I' to a platen or follower, H. The parts are so proportioned as to leave abundant room beneath the elevated platen for a stack of two pairs of molds.

The platen has terminal hooks J J', which are so formed as to engage under the projecting ends of one mold-cap, as in Figs. 1, 3, 4, 5, 6, and 7, or under both mold-caps, as at J'', Fig. 2. The additional hooks J'', when used, may be secured by bolts j entering holes j' in the hooks J J', or may be cast in one integral piece with said hooks and platen.

Projecting inwardly from the standards B B', so as to be flush, or nearly so, with the lower portions of the hooks in the depressed position of the platen, are lugs K K' K'' K'''.

L is a handle or lever by which the shaft E with its dependent platen is operated.

The operator, standing or being seated at the wrapping-bench, and being provided with three pairs of cigar molds of the ordinary many-celled kind, so manipulates the lever L as to bring the platen-hooks flush with the lugs. He then places in the press a pair of empty molds (or a block of corresponding thickness) and a pair of filled molds, one on top of the other. He then depresses the lever L so as to impart the first squeeze or pressure to the contained fillings, and proceeds to charge another pair of molds, which having done, he raises lever L, and by so doing lifts the cap of the just-pressed mold, whose lower part is at the same instant held down by the lugs K K' K" K". This mold, which may be designated as "mold No. 1," and the accompanying empty mold are then withdrawn from the press, and if form Fig. 2 has been used, the fillings of mold 1 are turned one-quarter round, in order, in the succeeding pressure, to remove

2, is then inserted in the press and squeezed, and the empty mold 3 is filled. The press is then opened, and molds 1 and 2 are withdrawn, one or both, in the open condition, according to whether form Fig. 1 or form Fig. 2 has been used, and in the latter case the fillings of mold 2 are turned in their matrices, and said mold is reclosed and returned to the press in company with the now charged mold 3, for the second squeeze of the former and the first squeeze of the latter mold.

In the meantime mold 1, which has been left upon the bench, is emptied of its bunches, which the operator then wraps while they are in the moist and spongy condition, and mold 1, being refilled, takes the place of that which has been subjected to two pressures, the abovedescribed series of operations being continued until the batch of tobacco has been worked

The block or empty pair of molds, in place of one pair of filled molds, is of course dispensed with after removal of the first squeezing. By this means the common molds are made available and each mold undergoes two squeezings, which, when form Fig. 2 is used, enables each filling to be turned one-fourth around between the first and second squeezings, and each mold being automatically opened, no time is lost in emptying the same or in turning its contents.

A less or greater number of molds may be used with my improved mold pressing and opening device; but I have described and prefer the use of three molds to one press, because I find that that number secures sufficient set of the bunches for expeditious and accurate hand-wrapping without sacrifice of the elastic sponginess so necessary in the manufacture of a merchantable hand-made

cigar.

Along with great saving of expense over the old-fashioned hand work, there is a saving both in quality and expense over the use of the common screw-press, in which the bunches, becoming dried and set, do not adhere to and plumply fill their wrappers, as bunches which retain their moisture and elasticity do, while even over the common screwpressed cigars there is a material saving of time and labor, the workman not being obliged to quithis seat at the wrapping-bench to empty, fill, and pull the screw-presses.

The above illustration of my invention may be modified in non-essential particulars. For example, the slots in the standards may be omitted, and the platen may have at each extremity two hooks on the same level, so as to give it a forked form, J", Figs. 6 and 7, a single lug, K", from each standard being substituted for the pair of lugs K K' of the preceding figures.

The device may be adapted to hold a greater or less number of the common two-part molds

than here indicated.

The comparatively small amount of room occupied by my press enables it to be placed on the rear part of the wrapping-bench, and even two of them to be arranged back to back on two wrapping-benches, similarly arranged, as is often the case; and this advantage ensues even if the mold-opening devices be omitted. And I therefore consider such a mold-press as here shown, even without such devices, to embrace some of the advantages of my invention.

I claim as new and of my invention—

1. In a cigar-mold press, the stationary lugs K K' K" K" on the frame, in the described combination with the hooked projections J J' from the rising and falling platen, for the automatic opening of the mold or molds in the act of retracting the platen, substantially as

2. In combination with the platen or follower of a cigar-mold press, the two or more series of hooked projections J J' J", for uncapping two or more pairs of molds in the act of releasing the platen pressure, substantially

as set forth.

3. A cigar-mold pressing and releasing device, comprising in the described combination a base, A, standards B B', having the lugs K K' K'' K''', beam C, rock-shaft E, having lever L, and the cams F F', connected by rods G G' to a follower, H, provided with hooks J J', for coaction with said lugs, in the manner set forth.

In testimony of which invention I here-

unto set my hand.

NAPOLEON DU BRUL.

Attest:

GEO. H. KNIGHT, L. H. Bond.